

**CITY OF PHILOMATH
Wastewater System Facilities Plan,
Philomath, Oregon**

Section 8

**Recommended Capital Improvement Priorities &
Implementation Plan**

SECTION 8 RECOMMENDED CAPITAL IMPROVEMENT PRIORITIES AND IMPLEMENTATION PLAN

8.1. General Prioritization Issues

As summarized in the previous sections, there is a need for sanitary sewerage system improvements within the study area to correct existing and projected deficiencies. Some of these deficiencies are more critical than others. Some are deficient under existing conditions, while others will become deficient as time passes and the existing systems continue to age. In order to assist the City in the planning and scheduling the construction of needed improvements, the improvements recommended in previous sections are grouped as Priority 1, Priority 2 and Priority 3 as outlined below.

In order that the recommended improvements resolve existing problems and meet the requirements for future growth within the study area, this prioritization is necessary, since the City obviously cannot afford all of the long term improvements required for the study area at this time. Some improvements are not critical at the present time, but will be needed later as development occurs and flows increase. Additional pipelines may be needed to serve future developments. In such cases, if current City policies are maintained, a portion or all of the cost for installing such pipelines will be borne by the developers as required by the particular development conditions.

- **Priority 1** (Critical Near Term Improvements) - These are those projects representing existing deficiencies (currently needed to meet existing and near future projected flows) or public health problem areas needing immediate attention. Priority 1 improvements are further broken into Class A and Class B Priorities, with Class A being the most critical. It is recommended that Priority 1 improvements be accomplished as soon as practical considering financing, construction time and timing associated with other related projects.
- **Priority 2** (Vital Future Improvements) - These are improvements that are anticipated to be needed in the future as the existing on-site systems age and begin to fail. Although not critical at this time, they should be considered improvement projects that if not constructed at this time, will be upgraded to Priority 1 at some time in the future.
- **Priority 3** (Long Term Improvements/Possible Future Need) - These improvements are needed to improve system reliability or to convey future design flows if land develops to future City zone intensities. While important, they are not considered to be critical at the present time. If possible, these improvements should be incorporated into other improvement projects that may allow for concurrent construction. They

may be constructed by developers in conjunction with the utility construction associated with development.

Each of the projects was examined and assigned a priority for implementation according to the criteria described hereafter. In keeping with the organization of preceding sections, the prioritization of the collection system improvements and the treatment system improvements are presented separately.

In addition to the two phases of WWTP improvements, 23 projects are recommended for inclusion in the collection system portion of the Sanitary Sewer Capital Improvements Plan (Priority 1 & 2 projects). The preliminary project cost estimates for the projects in each of these categories are approximately as listed below. A breakdown of the construction costs, contingency, design and administration/financing costs are contained in **Appendix I**.

Priority 1A	
• Collection System	\$2,584,000
• I/I Reduction	\$220,000/yr
Priority 1B	
• WWTP Phase I	\$2,058,275
Priority 2	
• Collection System	\$1,847,000
• WWTP Phase II.....	\$435,000
Priority 1A Total (excluding annual I/I Budget)	\$2,584,000
Priority 1B Total	\$2,058,275
Priority 2 Total.....	\$2,282,000
Total 1A & 1B (excluding annual I/I Budget)	\$4,642,275
Grand Total (excluding annual I/I Budget).....	\$6,924,275

Costs are 2003 dollars and assume dry weather construction, ENR July 2003 20 Cities Index = 6696 (see **Section 3**).

8.1.1 Collection System Project Prioritization Criteria

Four criteria were used to evaluate individual projects and alternative capital improvement programs for the collection system. Each of the projects and alternative capital improvement programs were examined and rated according to the following criteria.

- Public Health Concerns. The driving force behind this Facilities Plan and the proposed improvements is the need to correct existing health hazards within the study area.

- Anticipated Time until Projected Flow Increases. The anticipated timeframe for the development of land within the basins and tributary to the proposed improvements was considered.
- Structural Damage/End of Useful Life. Projects to replace damaged components or components that have reached the end of their useful life and no longer function as designed were assigned a higher priority.
- Capital Costs. Capital costs of the projects were considered, including the costs of implementing a project, such as surveying, design, permitting, construction, legal fees and administration. Costs for acquisition of land and/or easements were included based on assumed property values. Projects that will need to be constructed by developers in conjunction with future developments were given a lower priority than projects that may be largely the responsibility of the City.

8.1.2 Ranking of Recommended Improvements

Many of the problems identified in the existing collection system are the result of sewer facilities that are inadequately sized for the areas draining to them under buildout conditions. **Table 8-1** outlines and prioritizes the proposed capital improvements relating to both the collection and treatments systems. **Figure 8-1** shows the recommended collection system improvements by priority.

**TABLE 8-1
Recommended Capital Improvement Priorities**

Project Location(s)	Priority	Total Estimated Project Cost	Oversize Cost Required for Future Growth
I/I Reduction Plan (Original 1952 Collection System)	1A	\$222,000/yr ⁽¹⁾	\$0
Pump Station A (16th & Cedar)	1A	\$1,125,000	\$468,000
Overflow Structure (15th & College)	1A	\$11,000	\$6,000
Buried Fuel Tank at Newton Creek Pump Station	1A	\$14,000	\$2,500
WWTP Phase I Improvements	1B	\$2,058,275	\$1,808,035
Pump Station A Trunk Sewer Improvements			
Cedar Street (MH 200 to MH 29)	1A	\$278,000	\$32,000
13th Street (MH 29 to MH 31)	1A	\$215,000	\$22,000
Applegate Street (MH 31 to MH 32)	1A	\$93,000	\$10,000
Basin N3A Trunk Sewer Improvements			
Applegate Street (MH 1 to MH 2)	1A	\$77,000	\$0
20th Street (MH 2 to MH 6)	1A	\$128,000	\$0
College Street (MH 6 to MH 9)	1A	\$71,000	\$0
12th Street Trunk Sewer Improvements			
12th Street (MH 32 to MH 71)	1A	\$188,000	\$22,000
Basin A6 Trunk Sewer Imps. Phase I			
Applegate Street (MH 32 to MH 34)	1A	\$164,000	\$24,000
Applegate Street (MH 34 to MH 35)	1A	\$63,000	\$8,000
10th Street (MH 34 to MH 45)	1A	\$80,000	\$8,000
Main Street (MH 45 to MH 46)	1A	\$77,000	\$8,000
WWTP Phase II Improvements	2	\$435,000	\$435,000
Basin N3B Trunk Sewer Improvements			
Applegate Street (MH 203 to MH 205)	2	\$90,000	\$15,000
Applegate Street (MH 205 to MH 208)	2	\$227,000	\$12,000
Basin A6 Trunk Sewer Imps. Phase II			
9th Street (MH 35 to MH 36)	2	\$32,000	\$4,000
Alley (MH 36 to MH 38)	2	\$124,000	\$17,000
Main Street (MH 46 to MH 52)	2	\$74,000	\$9,000
8th Street (MH 52 to MH 53)	2	\$55,000	\$7,000
Timber Estates Pump Station Imps	2	\$113,000	\$0
Newton Creek Pump Station Capacity Imps			
New Force main to WWTP	2	\$832,000	\$832,000
Pump Station Improvements	2	\$300,000	\$300,000

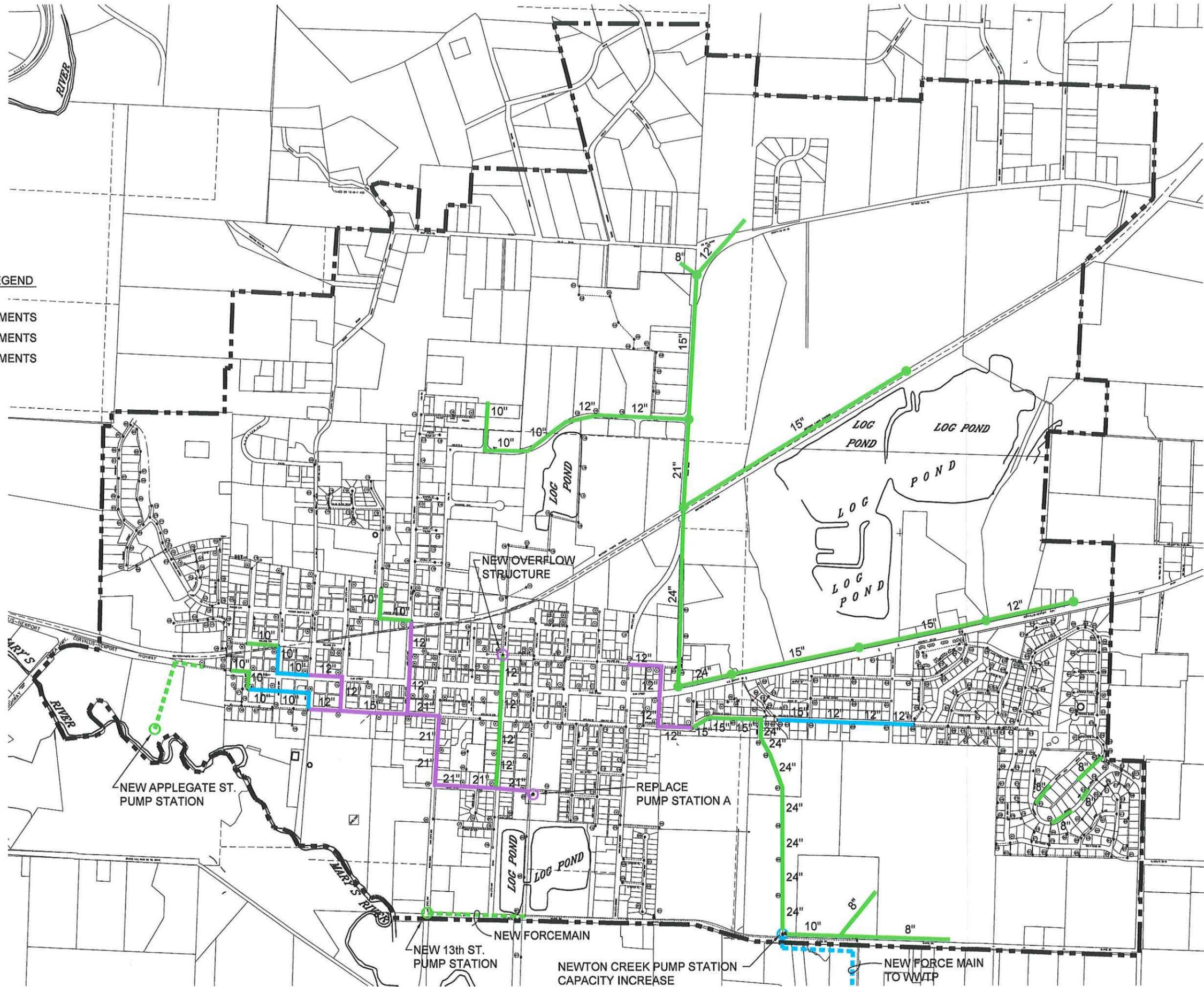
(1) Funds generated as part of the I/I reduction plan may be used to complete the trunk sewer replacement projects listed in this table.



0 300 600 1200
(Feet)

RECOMMENDED IMPROVEMENTS LEGEND

- PRIORITY 1 IMPROVEMENTS
- PRIORITY 2 IMPROVEMENTS
- PRIORITY 3 IMPROVEMENTS



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WE
WESTTECH ENGINEERING, INC.
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CITY OF PHILOMATH
2003 SANITARY SEWER FACILITIES PLAN
**RECOMMENDED
COLLECTION SYSTEM
IMPROVEMENTS**

FIGURE
8-1
JOB NUMBER
960.3130.0

8.2. Funding Issues

As a general rule, small communities are not able to finance major sewerage system improvements without some form of government funding such as low interest loans or grants. It is anticipated that the funding for the recommended capital improvement plan outlined herein will be from multiple sources, including systems development charges (SDC's), monthly user fees, as well as state and federal grant and loan programs. The following section outlines the major local and State/Federal funding programs that may be available for these projects. A recommended financing strategy will then be presented.

8.2.1 Upgrades Required for Current Residents versus for Future Growth

Although the No Growth/No Action alternative was discarded as an alternative for purposes of planning for the future upgrade of the wastewater collection and treatment system, it may need to be considered in a modified form as part of the process of obtaining funding for the proposed system upgrades. While some funding sources can be used for financing upgrades required to accommodate future growth, other funding sources specifically exclude projects required due to growth. For example, projects primarily needed for growth are not eligible for funding under the area wide benefit public works category of the Community Development Block Grant program.

It is anticipated that if no growth occurred during the planning period, the City would still be required to perform a significant amount of work on the collection system and WWTP during the study period. Only a few of the recommended improvements are required entirely to address future growth. Most of the alternatives are required initially to remedy current deficiencies but must be sized to accommodate future growth. In other words, most of the alternatives include an upsizing component that is necessary for future growth. To determine the portion of a particular project that is required to meet current deficiencies, the project cost was multiplied by the ratio the existing flows to the projected flows (e.g., 2027 flows for WWTP improvements and buildout flows for collection system improvements). The projects, or portions of the projects, required to accommodate future growth are listed in **Table 8-1**.

8.2.2 Annual Operation & Maintenance Costs

Annual Operation and Maintenance (O&M) costs are recurring costs typically funded through user rates. Long term replacement of the collection system and upgrading of the treatment plant are included under system replacement. **Table 8-2** presents annual O&M costs both for the proposed wastewater system and anticipated needs during the 20 year planning period. All costs are in 2003 dollars.

TABLE 8-2 Annual Operation & Maintenance Costs		
Item	2002/2003 Budget	Recommended 2007 Budget
Personal Services	\$188,359	\$233,000
Materials & Services	\$173,878	\$215,300
Debt Service	\$50,938	\$50,938
Transfers	\$99,150	\$122,700
Operating Contingency	\$20,000	\$25,000
Unappropriated Reserve	\$29,000	\$36,000
TOTAL	\$561,325	\$682,938

The 2002/2003 budget presented above does not include major capital improvements projects.

8.2.3 Existing Sanitary Sewer Funding Mechanisms

Funding for the City's existing wastewater system comes from two major sources, user fees and system development charges (SDC). Since SDCs cannot be used to finance operation, maintenance (O&M), and replacement costs of a sewer system, the O&M and repair costs must be financed from the user fees.

Sewer User Fee. The City's sewer Ordinance #624 (**Appendix D**) provides the method for assessing sewer user fees. The City sewer users are billed on a monthly basis for sanitary sewer service. Users are first classified as residential, commercial, or industrial. Residential users are charged a base monthly fee plus a use charge based upon actual water consumption during the winter months, and the average winter consumption during the summer months. Commercial and Industrial users are charge a base monthly fee plus a use charge based on actual water consumption on a year-around basis. The present base rate is \$10.00. For multi-unit residential connections the base charge is multiplied by the number of units and discounted by 50%. The use charge varies depending on user classification. For residential users the use charge is \$1.80 per 100 cubic feet (748 gallons). For commercial and industrial users, the use charge is \$1.91 per 100 cubic feet. For typical residential users, this monthly rate equates to approximately \$345.30 per year or \$28.78 per month per dwelling unit. The City's sewer use ordinance also contains provisions for adjusting the user fee for high strength wastes.

Sewer SDC. SDC fees are tied to water meter size as shown in **Table 8-3**.

Meter Size	SDC Fee
¾ Inch	\$1,346
1 Inch	\$1,912
1 ½ Inch	\$3,243
2 Inch	\$5,194
3 Inch	\$10,497

8.2.4 Local Funding Sources

To a large degree, the type and amount of local funding used for the sewerage system improvements will depend on the amount of grant funding obtained and the requirements of any loan funding. Local revenue sources for capital improvements include ad valorem taxes (property taxes), various types of bonds, sewer user fees, connection fees, and system development charges (SDC). Local revenue sources for operating costs include ad valorem taxes and sewer user fees. The following sections discuss the local funding sources and financing mechanisms that are most commonly used for the type of capital improvements presented in this study.

8.2.4.1 Existing Debt Service

The City currently has no outstanding debt associated with the sanitary sewer system.

8.2.4.2 User Fees

Although user fees are not sufficient to finance major capital construction projects, they can be used to repay long term financing. User fees are typically the sole source of revenue to finance sewer system operation and maintenance. User fees are monthly charges to all residences, businesses, and other users that are connected to the sewer collection system. These fees are established by the City Council and may be modified as needed to account for changes in O&M costs, need for new improvements, etc. The monthly charges are typically based on a user classification (i.e., single family dwelling, multiple family dwelling, school, commercial, etc.), as well as the amount of wastewater discharged to the system. The most common method of estimating the wastewater discharge rate is to base it on water usage. This is how the City currently establishes rates for each user.

8.2.4.3 System Development Charge (SDC) Revenues

A system development charge (SDC) is a fee collected by the City as each piece of property is developed. SDCs are used to finance necessary capital improvements and municipal services required by the development. SDCs can be used to recover the capital costs of infrastructure required as a result of the development. As established in ORS 223, an SDC can have two principal elements, the reimbursement fee and the improvement fee. Fees are collected at issuance of building permits. It is important to note that operation, maintenance, and replacement costs cannot be financed or repaid by SDC revenues.

The reimbursement portion of the SDC is the fee for buying into existing or under construction capital facilities. The reimbursement fee represents a charge for utilizing excess capacity in an existing facility that was paid for by someone else. The revenue from this fee is typically used to pay back existing loans for improvements.

The improvement portion of the SDC is the fee designed to cover the costs of capital improvements that must be constructed to provide an increase in capacity.

Based on the information contained in this Facilities Plan, it is strongly recommended that the City update the SDC fee schedule based on the projected capital improvement costs for the recommended sewerage system improvements.

8.2.4.4 Connection Fees

Many cities charge connection fees to cover the cost of connecting new development to wastewater systems. There are two types of connection fees typically assessed. The first is for brand new connections, and is designed to cover the cost of City inspections at the time of physical connection to the sewer system.

The second type of fee is typically designed to defray the administrative cost to the City of setting up a new account, and is charged on both brand new services and when a sewer service is transferred to a new owner.

8.2.4.5 Capital Construction (Sinking) Fund

Sinking funds are often established as a budget line item to set aside money for a particular construction purpose. A set amount from each annual budget is deposited in a sinking fund until sufficient revenues are available to complete the project. Such funds can also be developed from user fee revenues or from SDCs. The City Council should consider setting aside reserves immediately for the expansion and upgrades recommended herein as

well as improvements that will be required at the end of the 20 year design life of the new facilities. This will allow the City to make future improvements without having to obtain outside financing.

8.2.4.6 General Obligation Bonds

One traditional way to fund municipal sewer projects is through the sale of municipal general obligation (GO) bonds. This is the most often used form of local financing for large scale utility improvements benefiting a major portion of the City. GO bonds utilize the City's basic taxing authority and are retired with property taxes based on an equitable distribution of the bonded obligation across the City's assessed valuation. General obligation bonds are normally associated with the financing of facilities that benefit an entire community and must be approved by a majority vote of the City's voters.

General obligation bonds are backed by the City's full faith and credit, as the City must pledge to assess property taxes sufficient to pay the annual debt service. This portion of the property tax is outside the State constitutional limits that limit property taxes to a fixed percentage of the assessed value. The City may use other sources of revenue including water user fee revenues to repay the bonds. If it uses other funding sources to repay the bonds, the amount collected as taxes is reduced commensurately.

The general procedure followed when financing water system improvements with GO bonds is typically as follows.

- Determination of the capital costs required for the improvement.
- An election by the voters to authorize the sale of bonds.
- The bonds are offered for sale.
- The revenue from the bond sale is used to pay the capital costs associated with the project(s).

GO bonds can be "revenue supported," wherein a portion of the user fee is pledged toward repayment of the bond debt. The advantage of this method is that the need to collect additional property taxes to retire the bonds is reduced or eliminated. Such revenue supported GO bonds have most of the advantages of revenue bonds, plus lower interest rate and ready marketability.

The primary disadvantage of GO bond debt is that it is often added to the debt ratios of the City, thereby restricting the flexibility of the municipality to issue debt for other purposes.

8.2.4.7 Revenue Bonds

These are similar to GO bonds, except they rely on revenue from the sales of the utility (i.e. user fees) to retire the bonded indebtedness. The primary

security for the bonds is the City's pledge to charge user fees sufficient to pay all operating costs and debt service. Because the reliability of the source of revenue is relatively more speculative than for GO bonds, revenue bonds typically have slightly higher interest rates.

The general shift away from ad valorem property taxes makes revenue bonds a frequently used option for payment of long term debt. Many communities prefer revenue bonding, because it insures that no additional taxes are levied. In addition, repayment of the debt obligation is limited to system users since repayment is based on user fees.

One advantage with revenue bonds is that they do not count against a City's direct debt. This feature can be a crucial advantage for a municipality near its debt limit. Rating agencies evaluate closely the amount of direct debt when assigning credit ratings. There are normally no legal limitations on the amount of revenue bonds that can be issued. However, excessive issue amounts are generally unattractive to bond buyers because they represent high investment risks.

Under ORS 288.805-288.945, Cities may elect to issue revenue bonds for revenue producing facilities without a vote of the electorate. Certain notice and posting requirements must be met and a sixty (60) day waiting period is mandatory.

The bond lender typically requires the City to provide two additional securities for revenue bonds that are not required for GO bonds. First, the City must set user fees such that the net projected cash flow from user fees plus interest will be at least 125% of the annual debt service (a 1.25 debt coverage ratio). Secondly, the City must establish a bond reserve fund equal to maximum annual debt service or 10% of the bond amount, whichever is less.

8.2.4.8 Improvement Bonds

Improvement (Bancroft) bonds are an intermediate form of financing that are less than full-fledged GO or revenue bonds. This form of bonding is typically used for so-called Local Improvement Districts, or LIDs.

Improvement bonds are payable from the proceeds of special benefit assessments, not from general tax revenues or user fees. Such bonds are issued only where certain properties are recipients of special benefits not occurring to other properties. For a specific improvement, all property within the designated improvement district is assessed on the same basis, regardless of whether the property is developed or undeveloped. The assessment is designed to divide the cost of the improvements among the benefited property owners. The manner in which it is divided is in proportion to the direct or

indirect benefits to each property. The assessment becomes a direct lien against the property, and owners have the option of either paying the assessment in cash or applying for improvement bonds. If the improvement bond option is taken, the City sells Bancroft Improvement Bonds to finance the construction, and the assessment is paid over 20 years in 40 semiannual installments plus interest.

The assessments against the properties are usually not levied until the actual cost of the project is determined. Since the determination of actual costs cannot normally be determined until the project is completed, funds are not available from assessments for the purpose of paying costs at the time of construction. Therefore, some method of interim financing must be arranged.

The primary disadvantage to this source of revenue is that the development of an assessment district is very cumbersome and expensive when facilities for an entire City are contemplated. Therefore, this method of financing should only be considered for discrete improvements to the collection system where the benefits are localized and easily quantified.

8.2.4.9 Certificates of Participation

Certificates of Participation are a form of bond financing that is distinct from revenue bonds. While it is more complex and typically has a higher interest rate than revenue bonds, it is a process controlled by the City Council, and it does not have to be referred to the voters, which can result in a significant time savings. Current rates for Certifications of Participation range from 4.5 to 5.5%.

8.2.4.10 Ad Valorem Taxes

Ad valorem property taxes were often used in the past as a revenue source for public utility improvements. Historically, ad valorem taxes were the traditional means of obtaining revenue to support all local governmental functions. Ad valorem taxation provided a means of financing that reached all property owners that benefit or can potentially benefit from the water system, whether the property was developed or not. The construction costs for the project were shared proportionally among all property owners based on the assessed value of each property. Ad valorem taxation, however, is less likely to result in individual users paying their proportionate share of the costs as compared to their benefits.

8.2.5 State & Federal Grant & Loan Programs

Several state and federal grant and loan programs are available to assist municipalities finance wastewater system improvements. Based on data from the 2003 Community Development Block Grant Guidelines, 54.5% of families in Philomath are classified as low or moderate income. As such, Philomath is likely to qualify for many

programs. The primary sources of funding available for wastewater system financing are Rural Utilities Service (RUS), Special Public Works Fund (SPWF), the Water/Wastewater (W/W) Financing Program and the Community Development Block Grant (CDBG).

8.2.5.1 Rural Utility Services

Rural Utility Service (RUS), formerly the Rural Economic and Community Development (RECD), provides federal loans and grants to rural municipalities, counties, special districts, Indian tribes, and not-for-profit organizations to construct, enlarge, or modify water treatment and distribution systems and wastewater collection and treatment systems. Preference is given to projects in low-income communities with populations below 10,000.

Borrowers of RDA loans must be able to demonstrate the following:

- Monthly user rates must be at or above the "state wide average" of approximately \$43.11 per month.
- They have the legal authority to borrow and repay loans, to pledge security for loans, and to operate and maintain the facilities and services.
- They are financially sound and able to manage the facility effectively.
- They have a financially sound facility based on taxes, assessments, revenues, fees, or other satisfactory sources of income to pay for all facility costs including O&M and to retire indebtedness and maintain a reserve.

The maximum loan term is 40 years but the finance term may not exceed statutory limitations on the agency borrowing the money or the expected useful life of the improvements. The reserve can typically be funded at 10 percent per year over a ten-year period. Interest rates for RUS loans vary based on median household income (MHI). Based on the 2000 Census Data (**Appendix J**), the MHI for Philomath is \$41,461. Maximum grant amounts and loan interest rates based on MHI are shown on **Table 8-4**. These interest rates are subject to market fluctuations. As such, the exact interest rate will depend on when the funding application is submitted.

TABLE 8-4		
RUS Grant Funds & Loan Interest Rates Based on MHI		
Median Household Income (MHI) – 1990 data	Maximum Grant	Loan Interest Rate¹
<\$22,205	75%	4.50%
\$22,205 to \$27,756	45%	4.50%
> \$27,756	0%	4.62%
¹ – Current rates for the quarter 4/1/03-6/30/03.		

8.2.5.2 Oregon Economic and Community Development Department (OECDD)

a) Special Public Works Fund

The Oregon Economic and Community Development Department (OECDD) administers the SPWF program. The SPWF is a lottery-funded loan and grant program that provides funding to municipalities, counties, special districts, and public ports for infrastructure improvements to support industrial/manufacturing and eligible commercial economic development. Eligible commercial means commercial activity that is marketed nationally or internationally and attracts business from outside Oregon. Funded projects are usually linked to a specific private sector development and the resulting direct job creation (i.e., firm business commitment), of which 30% of the created jobs must be "family wage" jobs. The program also funds projects that build infrastructure capacity to support industrial/manufacturing development where recent interest by eligible business(s) can be documented.

The SPWF is primarily a loan program, although grant funds are available based on economic need of the community. Although the maximum loan term is 25 years, loans are generally made for 20-year terms. The maximum loan amount for projects funded with direct SPWF money is \$1 million, while the maximum for projects financed with bond funds is \$10 million.

b) Bond Bank Program

The Bond Bank program, administered by OECDD, attempts to lower the cost of issuing debt by pooling small revenue bond issues from many communities into one large revenue bond issue. It uses lottery proceeds to write down financing costs, and to improve the debt/equity ratio on projects. The interest rate for repayment of funds is typically around 6 percent, with up to a 25 year term.

c) Water/Wastewater Financing Program

OECD also administers the W/W Financing Program, which gives priority to projects that provide system-wide benefits and help communities meet the Clean Water Act or the Safe Drinking Water Act standards. It is intended to assist local governments that have been hard hit with state and federal mandates for public drinking water systems and wastewater systems. In order to be eligible for this program, the system must be out of compliance with federal or state rules, regulations or permits, as evidenced by issuance of Notice of Non-Compliance by the appropriate regulatory agency. The funded project must be needed to meet state or federal regulations. Priority is given to communities under economic distress.

Similar to the SPWF, the W/W Financing Program is primarily a loan program, although grant funds are available in certain cases based on economic need of the community. Although the maximum loan term is 25 years, loans are generally made for 20-year terms. The maximum loan amount for projects funded with direct W/W money is \$500,000, while the maximum for projects financed with bond funds is \$10 million.

d) Economic and Community Development Block Grant

The OECD administers the CDBG, but the funds are from the U.S. Department of Housing and Urban Development (HUD), so all federal grant management rules apply to the program. The federal eligibility standards are strict. There are two subcategories of Public Works projects eligible for funding, "Public Water and Wastewater," and "Public Works for New Housing." Only the former is considered in this discussion.

Grants are available for critically needed construction, improvement, or expansion of publicly owned water and wastewater systems for the benefit of current residents. Generally, projects must be necessary to resolve regulatory compliance problems identified by state and/or federal agencies.

The program separates projects into three parts. Grants are available for:

- Preliminary Engineering and Planning Projects

Generally, these grants fund preparation or update of Water System Master Plans and Wastewater Facility Plans, as required by the Oregon Department of Environmental Quality or Oregon Health Division. In

In addition, funds for grant administration and preparation of a final design funding application can be included in the project budget. All plans produced with grant funds must be approved by the appropriate regulatory agency. Grants of up to \$10,000 can also be made for problem identification studies to delineate problems and corrective measures, as required by a regulatory agency.

- Final Design and Engineering Projects

Final design and engineering, bid specifications, environmental review, financial feasibility, rate analysis, grant administration, and preparing a construction funding application are all eligible project activities. The final design, plans and specifications must be approved by the appropriate regulatory agency before a grant will be awarded.

- Construction Projects

These grants fund construction and related activities, grant administration and land/permanent easement acquisition.

OECDD has established an evaluation system that gives priority to projects that provide system-wide benefits. The overall maximum grant amount per water or wastewater project is \$750,000 (including all planning, final engineering, and construction). The project cannot be divided locally into phases with the expectation of receiving more than one \$750,000 grant. In order to qualify for grant funding under this program, the water user rates must be at or above statewide averages.

8.2.5.3 Clean Water State Revolving Fund

The Clean Water State Revolving Fund (CWSRF) program is administered by the DEQ and provides loans to cities, counties, special districts, and Indian tribes to plan, design and construct water pollution control facilities, estuary management projects, and non-point source control plants. Applicants to the program must be a public agency. Current interest rates on construction loans are 2.94%. In addition, there is an annual servicing fee of 0.5% on the remaining balance. The term of the loans is 20 years.

8.2.6 Funding Scenarios

Several alternative funding scenarios with varying grant contributions were developed and evaluated to present a range of monthly user rates. Following adoption of the Facilities Plan and in conjunction with pursuing financing, the City should proceed with a formal user rate evaluation to determine the user fees required based on the most likely funding scenario. As previously stated, the SDC fee

structure should also be updated. As described later in this section, the recommended implementation schedule includes the completion of the Priority 1A improvements in summer of 2006 and the Priority 1B improvements in the summer of 2010. For demonstration purposes, the 2010 user fee was estimated based on various levels of grant funding.

As the funding scenarios demonstrate, the existing user fees are not sufficient to fund the recommended improvements even with a significant grant contribution. Therefore, rate increases are necessary if the City is to proceed with all of the recommended improvements.

- Scenario 1: No grant funding
- Scenario 2: \$750,000 (29%) total grant funding for priority 1A improvements.
- Scenario 3: \$1,000,000 (39%) total grant funding for priority 1A improvements.

Summaries of these scenarios are shown in **Table 8-5**.

The actual user fees required will depend upon a number of factors. A few of these factors including the level of grant funding, the number of service connections at the time the debt service payments begin, and the level of SDC revenue contributions available at that time. These factors are difficult to determine at the present time. In addition, estimated user rates are based on the assumption that all users consume the same amount of water and a uniform rate structure for all user classes. Since sewer rates are based on water consumption and user classification, the actual rates will vary accordingly. Therefore, the estimates in **Table 8-5** are rough approximations that merely demonstrate the point that the City's existing user fees are not sufficient to fund the recommended improvements.

TABLE 8-5
Preliminary 2010 Rate Analysis
(Priority 1A and 1B Improvements Only)

Component	Scenario 1	Scenario 2	Scenario 3
Capital Reserve Funds at end of year 2004 ¹	\$327,000	\$327,000	\$327,000
SDC Funds at end of year 2004 ^{1,2}	\$272,400	\$272,400	\$272,400
Capital Reserve Funds at end of year 2005 ³	\$403,350	\$403,350	\$403,350
Anticipated funds from I/I reduction plan ⁴	\$444,000	\$444,000	\$444,000
SDC Funds at end of year 2005 ^{2,5}	\$439,200	\$439,200	\$439,200
Total Grant Funding for Priority 1A Improvements	\$0	\$750,000	\$1,000,000
Total Project Budget – Priority 1A	\$2,584,000	\$2,584,000	\$2,584,000
Required Loan Amount for Priority 1A Improvements ⁶	\$1,297,450	\$547,450	\$297,450
Capital Reserve Funds at end of year 2009 ³	\$258,600	\$258,600	\$258,600
SDC Funds at end of year 2009 ⁷	\$696,600	\$696,600	\$696,600
Total Project Budget – Priority 1B	\$2,058,275	\$2,058,275	\$2,058,275
Required Loan Amount for Priority 1B Improvements ⁸	\$1,103,075	\$1,103,075	\$1,103,075
Existing Sewer Debt Service	\$50,938	\$50,938	\$50,938
Additional Debt Service for Priority 1A Imps. ⁹	\$104,110	\$43,929	\$23,868
Additional Debt Service for Priority 1B Imps. ⁹	\$88,500	\$88,500	\$88,500
Annual I/I Reduction Plan Costs	\$222,000	\$222,000	\$222,000
Annual O&M Costs	\$632,000	\$632,000	\$632,000
Total Annual Expenses	\$1,097,550	\$1,037,370	\$1,017,300
Estimated Avg 2010 Monthly User Fee ¹⁰	\$54.99	\$51.98	\$50.98

¹ – Based on Current CIP.

² – Includes both Improvement and Reimbursement portions of SDC fee.

³ – Assumes \$60,000 annual revenue and %5 interest earned per year.

⁴ – Assumes sewer rates increased in summer of 2004 (see implementation schedule), and two years of I/I reduction funds collected.

⁵ – Assumes SDC fees increased in summer of 2004 (see implementation schedule), and one year of SDC collections at updated SDC fees estimated to be ± \$4500 on average.

⁶ – Assumes construction of priority 1A improvements begins in the summer of 2006 and reserve funds and SDC funds at end of year 2005 as well as all I/I reduction funds used to fund project.

⁷ – Based on estimated SDC fees of ± 4,500 on average per connection. Number of connections estimated from population growth projections (see Section 2), and 2.85 people per connection. Assumes 5% interest earned.

⁸ – Assumes construction of priority 1B improvements begins in the summer of 2010 and reserve funds and SDC funds at end of year 2009 used to fund project.

⁹ – Assumes 20 year term, 5% interest.

¹⁰ – Assumes approximately 4,740 residents or approximately 1,663 connections at beginning of end of 2010.

8.2.7 Funding Recommendations

As is apparent from **Table 8-5**, the required user rate depends heavily on the amount of grant contribution. As previously stated, grant funding will require a user rate to be at least in the range of \$40-\$44 per month. The current City sewer rates are currently far below the monthly statewide average based on typical flow rates. As available grant funding on public works projects has decreased in the last several years, it will be incumbent upon the City to aggressively pursue grant funding. The first step in this process is to schedule a "one stop meeting" with Oregon Economic and Community Development Department (OECDD) and the preparation of applicable grant applications as soon as possible.

8.3. Recommended Implementation Schedule

8.3.1 Priority 1A and 1B

It is recommended that the City begin design work on the Priority 1A improvements as soon as possible after the final approval of the Facilities Plan. These include improvements to Pump Station A and upgrades to the gravity collection piping. The need for priority 1B improvements is growth dependent. Based on the growth projections presented herein, the priority 1B improvements are likely to be required by the end of 2010. Should growth occur faster or slower than projected herein, the schedule for the priority 1B improvements should be adjusted accordingly. A breakdown of the recommended project scheduled for Priority 1A and 1B improvements is presented in **Table 8-6**.

**TABLE 8-6
Recommended Implementation Schedule (Priority 1A & 1B)**

Milestone	Date
PHASE I	
Submit Draft Facilities Plan to DEQ & City	8/30/03
Receive Comments from DEQ & City	1/31/04
Submit Final Facilities Plan to DEQ	7/31/04
DEQ Approval of Final Facilities Plan	8/31/04
City adopts Final Facilities Plan	9/30/04
Perform Rate Study & Implement New User Rates & SDCs	12/31/04
Update CIP	12/31/04
Conduct Funding Meeting With OECDD and RUS	2/15/05
Submit Funding Applications	5/31/05
Finalize Funding Package	12/31/05
PHASE II – Priority 1A Improvements	
Select Design Consultant	1/31/06
Complete Predesign Report	3/31/06
DEQ Approval of Predesign Report	4/30/06
Start Detailed Design of Improvements	5/31/06
Complete Design of Improvements	1/31/07
DEQ Approval of Plans & Specifications	3/15/07
Advertise for Construction Bids	4/15/07
Receive Construction Bids	5/15/07
Award Contracts	6/15/07
Start Construction	7/15/07
Complete Construction of Priority 1A improvements	12/31/07
PHASE III – Priority 1B Improvements	
Select Design Consultant, Prepare Predesign Report	1/31/09
Start Detailed Design of Improvements	6/1/09
Complete Design of Improvements	12/1/09
DEQ Approval of Plans & Specifications	2/1/10
Advertise for Construction Bids	4/1/10
Receive Construction Bids	5/1/10
Award Contracts	6/1/10
Start Construction	7/1/10
Complete Construction of Priority 1B improvements	11/1/10